What's New in Gynecology

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PROGRESS has been recorded recently in all phases of gynecology, diagnostic, therapeutic and surgical. The discoveries and subsequent application in chemotherapy and antibiotics have been of an inestimable value. Particularly has the management of acute and subacute pelvic gonorrheal infections been affected. Patients with such infections receive 100,000 units of penicillin intramuscularly every three hours for 24 hours; 50,000 units every three hours thereafter, as warranted. Not infrequently the author further prescribes a sulfonamide preparation (triple), 1 gm. three or four times a day, combined, of course, with the usual medical care.

Although it is too early to evaluate the results, the author has used streptomycin in the treatment of one patient with pelvic tuberculosis. Dihydrostreptomycin,[4, 9, 10] a newer and less toxic form, was given. The patient, a 17-year-old Negro girl with a past history of pleural effusions, was given 0.5 gm. twice daily for ten days prior to and for 20 days following operation. When bilateral tubo-ovarian masses (6 to 8 cm.) were removed along with the uterus totally, extensive peritoneal and visceral tuberculous implants were noted. Two gm. of dihydrostreptomycin in saline was left in the peritoneal cavity prior to closure. Convalescence has been afebrile and satisfactory to this time.

LYMPHOGRANULOMA VENEREUM

Of interest to the gynecologist is a new antibiotic, aureomycin, described first in July 1948.[2] Although published reports are few, preliminary studies by Greenblatt[7] and others indicate aureomycin to be highly effective against the lymphogranuloma venereum group of diseases — benign rectal stricture, buboes and proctitis. Further, *in vitro* studies seem to show bacteriostatic or bactericidal activity against a wide variety of Gram-positive and Gram-negative bacteria, as well as against penicillin-resistant and streptomycin-resistant organisms. Oral use is recommended with a suggested dosage of 25 to 100 mg. per kilogram of body weight daily, according to the severity and type of infection.

BARTHOLINIAN ABSCESS

The author has aspirated Bartholinian abscesses with an 18-gauge needle on the mucous membrane side, following application of an aqueous solution of zepherin to the skin. The purulent fluid is replaced by 300,000 units of penicillin in saline solution (8-10 cc.). In a small series, observed about six months, surgical intervention has been avoided. As infection not infrequently coexists elsewhere, 500,000 units of penicillin is also given. Goldberger[6] and Lapid reported equally successful results.

VAGINAL THERAPY

Occasionally before, and frequently after operations involving the vaginal canal, the author has given the patients allantomide cream (sulfanilamide 15 per cent, 5 per cent lactose, buffered to pH 4.5 with lactic acid and allantoin.) One-half the contents of an applicator is expressed through a tube into the vagina daily. It is felt that the acid pH stimulates healing, while the sulfanilamide decreases incidence of infection. As an office procedure, this is recommended following cautery of the cervix. Patients have noted a welcome freedom from odor while the cream is being used. Although the reports[19] have not been favorable, the author has had particularly gratifying results with this medication in treating vulvovaginal mycoses due to candida albicans, but results with it against trichomonas have not been as successful as those reported by Parks.[19] Discontinuance has rarely been necessary because of sulfa sensitivity.

SENILE VAGINITIS

The treatment of senile vaginitis has been considerably simplified by the development of an estrogenic cream called Premarin, suitable for vaginal injection. By this method the mucous membrane is coated with a cream, affording an almost immediate healing and soothing effect. It is superior to suppositories, and oral medication is not necessarily needed. The side-effects frequently noted with synthetic products have not occurred.

INTRACTABLE PRURITUS VULVAE

Pruritus vulvae, often as disconcerting to the physician as to the patient, frequently occurs. It has been variedly attributed to many causes. Hill[8] suggests that in 75 per cent of cases it is due to neurogenic or functional causes; in 15 per cent to lichen sclerosus et atrophicans, kraurosis with or without leukoplakia; and in the remaining 10 per cent is caused by diabetes, infections caused by trichomonas and fungi, and allergic reactions to drugs and food. Complete study may be necessary and consultations sought before a diagnosis is established. The treatment may be protracted and and ineffectual. The patients often go from physician to physician. Efforts are directed toward the elimination of known etiological factors, for example, trichomonas and

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monilia. Because of constitutional inadequacies in patients with the disease, it is imperative that the patient-physician relationship be particularly harmonious and understanding.

Many surgical and roentgenological methods have been tried repeatedly without success. The author has used a method decribed by Reich,[20] consisting of injection of a substance, Zylacain,* with benefit to 58 patients. Three patients were reinjected within six months, resulting, as far as the author knows, in permanent relief. In one case the method was a complete failure. Two and one-half cc. of Zylacain solution is injected across the mons pubis and 5 cc. under each labium major (in the fatty subcutaneous tissue) and across the posterior fourchette between the anus and vagina. The author has doubled these amounts with no unfavorable sequelae. The rationale of this method of treatment presumably lies in a temporary interruption of the nerve pathways.

SMEAR DIAGNOSIS OF CANCER

The diagnosis of cancer has been facilitated by a new technique originated by Papanicolaou,[16, 17, 18] continued by Shorr[23] and Traut. The clinical application was quickly foreseen with consequent rapid expansion. This work is based on the premise that cancer of the female generative tract sheds its cells early and these may be collected, stained and studied.

The chief value at this time would appear to be a screening method for a large portion of our population, supplementary to well established and proven diagnostic tests such as multiple biopsies and curettage. It is agreed that the smear test should be encouraged in the semi-yearly or yearly examinations. Hope for an increased rate of cures lies in detecting the preclinical phase of the disease, but the limitations of the procedure are growing increasingly clear and the abuses becoming apparent. For instance, hysterectomy is not justified on the basis of a positive smear. In the absence of a known lesion, time can be taken for a recheck of the smear, possibly by other cytologists; moreover, examination of tissue obtained by biopsy, conization and curettage should be confirmatory, before radical measures are instituted.

Finally, it should be stressed that this is only another diagnostic aid, not to supplant a complete history and visual and palpatory examinations of the pelvis. The most important facet is interpretation of the smears, wherein special training, with an infinite degree of patience, is essential.

CARCINOMA IN SITU

The management of intra-epithelial carcinoma of the cervix, a comparatively rare lesion, has been radically changed. Over half of the patients with this disease who were studied by Te Linde[25] and Galvin[5] had some type of irregular bleeding, more commonly post-coital spotting, but history of it was elicited only by pointed questioning. Otherwise the patients were asymptomatic.

During the last few years, a new approach to the diagnosis and management of this early malignant process has resulted from the work of Te Linde and Galvin. Their substantiated belief is that cancer of the cervix begins in the basal layer of the portio vaginalis and that slight changes in this layer may be the precursor of the intra-epithelial cancer. As most cervical cancers begin at the junction of the stratified squamous with the columnar epithelium, biopsies should include this junction. In this preclinical group the Papanicolaou smear would be particularly applicable.

A new treatment, recommended by Te Linde and Galvin, consists of total hysterectomy and removal of the parametrium for 2 cm. on either side of the cervix, plus a generous cuff of the vagina. They suggest preoperative placement of ureteral catheters and caution that great care is necessary to preserve the ureteral blood supply, as damage to it may cause fistulas. Some observers have questioned the wisdom of conserving an ovary as is sometimes done when this procedure is carried out in a young woman. A few more years will undoubtedly provide the answer. Among 67 patients operated upon between 1940 and 1948 there have been no recurrences to date and all are living.

This procedure is done only in the case of microscopic cancer. If the lesion can be seen by the naked eye, radiation is indicated.

The treatment of recognizable cancer of the cervix is by radiation; operation is restricted to a small percentage of young, good risk, thin patients, with limited metastases. Largely through the efforts of Meigs,[14] Taylor,[24] Morton,[15] Martzloff[13] and Carter,[1] a renewed interest in the radical Wertheim[26] treatment of carcinoma of the cervix has developed. Meigs' reasoning for radical operation is based on these points: One, that removal of the cervix eliminates the possibility of recurrence in it; two, that certain cervical cancers are radioresistant (adenocarcinoma-mucoid); three, that operation damages the bowel less than does radiation; four, that lymph node metastases are in some cases more likely to be cured by operation than by radiation. The operation is a formidable one which demands the ultimate in surgical skill.

STRESS INCONTINENCE

For urinary incontinence in the menopausal period, Salmon[21] and his co-workers reported favorably on vaginal suppositories containing stilbestrol. The same hormone was used by veterinarians to overcome incontinence in spayed dogs.

An entirely new development is Kegel's[12] treatment of urinary stress incontinence by exercises to strengthen and reeducate weak perivaginal and periurethral sphincter muscles. Studies with a "perineometer" convinced Kegel that congenital weakness of neuromuscular structures of the perineum was the causative factor in many cases. He found that

*2 per cent procaine, 5 per cent benzylalcohol in oil, prepared by Abbott Laboratories.

in 70 per cent of 200 women complaining of poor urinary control the condition was caused by muscular dysfunction of a degree not requiring operation for correction. "All [of the 70 per cent] responded to muscle reeducation in two to six weeks," he reported.

CULDOSCOPY

Visualization of the pelvic viscera through the posterior vaginal wall by means of an instrument is known as culdoscopy. According to Decker[3] indications for use are: In establishment of correct diagnosis when all other aids have been exhausted (as in possible ectopic pregnancy), in locating ruptured bleeding corpus luteum cysts or follicular cysts, in search for the cause of vaginal bleeding if results of conventional pelvic examination are vague or indefinite, in some sterility studies, in ruling out small ovarian tumors, cysts, pelvic endometriosis, or pelvic tuberculosis. Use of the instrument is contraindicated in the presence of such local abnormalities as abscess or inflammatory processes involving the culdesac, fixed retroposition of the uterus and acute infections of the vagina. It is also contraindicated for patients with systemic (i.e. decompensated) heart disease or for those who are so debilitated that the knee-chest position would be inadvisable. There have been no unfavorable sequelae to use of the instrument in experienced hands.

PREMENSTRUAL TENSION

Characteristically the symptoms of premenstrual tension simulate those of the menopause, the foremost being nervousness, irritability, tension, headache and depression. Of less frequent occurrences are hot flashes, vertigo and insomnia. Although some physicians give estrogenic substances for relief of the condition, this seems ill-advised in view of the concept that too much estrogen may already be present during this period. A suggested treatment is androgen, 80 to 100 mg. a month in divided doses, but any prolonged use of this substance should be discouraged. The author's recommendation is progesterone, 10 mg. tablet once or twice daily, and ammonium chloride, 0.5 gm. three times daily, for ten days prior to menses. Occasionally it is advisable to restrict intake of sodium chloride. Results with this medication have been exceedingly satisfactory.

BASAL TEMPERATURE

Helpful in ascertaining the time of ovulation is the rectal temperature, taken prior to arising daily and recorded graphically. A slight fluctuation is noted from the first day of menstruation to ovulation, but when ovulation takes place the temperature drops by ½ to 1 degree or more. The following day a rise of ½ to 1 degree occurs and that level is maintained until the beginning of menses. Should pregnancy ensue, the temperature remains elevated.

NEW SURGICAL RECOMMENDATIONS

In correcting post-hysterectomy prolapse of the vagina, Shaw's[22] method of utilizing the anterior rectus fascia as strips, threaded back and down following the course of the round ligaments, with fixation to the vagina, gives a satisfactory support. In a case of prolapse of the vaginal vault observed by the author, in addition to the Shaw procedure the sacro-uterine ligaments were approximated and fixed to the vault. After eight months, no recurrence is evident. For correction of prolapse of the cervix, the author has observed good result with vaginal trachelectomy.

Judd[11] has recommended intra-abdominal repair of moderate sized cystoceles when total hysterectomy is necessary. The pubocervical fascia is approximated to the sacro-uterine ligaments and the vaginal vault. This procedure is ideal in the presence of small cystoceles without incontinence, for otherwise the anterior plastic operation would have to be accomplished prior to the laparotomy.

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QUESTIONS AND ANSWERS

DR. DOYLE: There is a question about the Bartholinian abscess treatment: "How long after aspiration and penicillin treatment of these abscesses have you followed up these cases?"

These cases have been observed around six months. The cases now under observation at General Hospital have only been of recent issue. There have been one or two recurrences. It is possible that if patients in the acute stages were watched a few days longer, and reinjected with penicillin, operation could be avoided. It is not an entirely new procedure. It has been used also in pelvic abscesses, and other abscesses of the chest and elsewhere that had only to be reached with a needle.